

U.S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS
WASHINGTON

(Revised to May 5, 1937)

STRUCTURAL CLAY PRODUCTS, STONE, AND MASONRY:
TECHNICAL PUBLICATIONS BY MEMBERS OF THE STAFF
OF THE NATIONAL BUREAU OF STANDARDS.

This letter circular gives a list of publications on STRUCTURAL CLAY PRODUCTS, STONE, AND MASONRY by members of the staff of the National Bureau of Standards. Some of these publications were printed in the regular series of the Bureau and others in various scientific, technical and trade association journals.

For ready reference and convenience in ordering the separate papers of the Bureau, these have been listed with the serial letter and number in one column, and the price in the second column. The publications for which prices are indicated may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D.C. The prices quoted are for delivery to addresses in the United States and its possessions, and to Canada, Cuba, Mexico, Newfoundland, the Philippines, and the Republic of Panama. When remitting for delivery to other countries than those, include in your remittance one-third of the total cost of the publications to cover postage. Remittances should be made payable to the Superintendent of Documents, Government Printing Office, Washington, D. C., and sent to him with the order. "O.P." in the column marked "Price" indicates that the publication is out of print, but may be consulted at most large libraries. A complete list of the Bureau's publications (Circular C24 and Supplement) is also generally available at such libraries.

Serial letters are used to designate BUREAU PUBLICATIONS:

S = "Scientific Papers" of the National Bureau of Standards. From nos. 1 to 329, inclusive, the separate papers of this series were known as reprints from the "Bulletin of the Bureau of Standards" (Bul. BS). Subsequently, from nos. 330 to 572, the separates were known as reprints from the "Scientific Papers of the Bureau of Standards" (Sci. Pap. BS). This series was superseded by the "Bureau of Standards Journal of Research" in 1928.

- T = "Technologic Paper" of the National Bureau of Standards. T1 to T202 were issued each independent of the other with individual pagination. Later they were assembled to make the first 15 volumes of this series, and subsequent separates were given volume pagination (Tech. Pap. BS). This series was superseded by the "Bureau of Standards Journal of Research" in 1928.
- RP = "Research Papers." These are reprints of articles appearing in the "Bureau of Standards Journal of Research" (BS J. Research) and the "Journal of Research of the National Bureau of Standards" (J. Research NBS), the latter being the title of this periodical since July 1934 (volume 13, number 1).
- LC = "Letter Circular" of the National Bureau of Standards.
- R = "Simplified Practice Recommendations" of the National Bureau of Standards.
- BH = "Building and Housing Publications" of the National Bureau of Standards.

SCIENTIFIC PAPERS

<u>Series</u>	<u>Price</u>	
S526	O.P.	Transmission and absorption of sound by some building materials. E.A. Eckhardt and V.L. Chrisler. Sci. Pap. BS <u>21</u> , 37(1926-27).
S552	O.P.	Transmission of sound through building materials. V.L. Chrisler. Sci. Pap. BS <u>22</u> , 227(1927-28).

TECHNOLOGIC PAPERS

T22	O.P.	The effect of overfiring upon the structure of clays. A.V. Fleininger and E.T. Montgomery. Tech. Pap. BS, T22, (1913).
T70	O.P.	Durability of stucco and plaster construction. R.J. Wig, J.C. Pearson and W.E. Emley. Tech. Pap. BS, <u>7</u> , (1916-17).

TECHNOLOGIC PAPERS (Cont'd.)

<u>Series</u>	<u>Price</u>	
T85	10¢	Manufacture and properties of sand-lime brick. W.E. Enley. Tech. Pap. BS, T85, <u>9</u> , (1916-17).
T111	O.P.	Compressive strength of large brick piers. J.C. Bragg. Tech. Pap. BS, T111, <u>11</u> , (1918-19).
T120	O.P.	Tests of hollow building tiles. B.D. Hathcock and E. Skillman. Tech. Pap. BS, T120, <u>12</u> , (1919).
T123	O.P.	Physical and chemical tests of the commercial mar- bles of the United States. D.W. Kessler. Tech. Pap. BS, T123, <u>12</u> , (1919).
T130	O.P.	Best insulating properties of building materials. V.A. Hull. Tech. Pap. BS, T130, <u>12</u> , (1919).
T169	O.P.	Measurement of plasticity of mortars and plas- ters. W.E. Enley. Tech. Pap. BS, T169, <u>13</u> , (1919).
T184	75¢	Fire tests of building columns. S.H. Ingberg, H.K. Griffin, W.C. Robinson and R.E. Wilson. Tech. Pap. BS, T184, <u>15</u> , (1921).
T220	25¢	Tests of a hollow tile and concrete floor slab reinforced in two directions. V.A. Slater, A. Hagener and G.P. Anthos. Tech. Pap. BS, T220, <u>16</u> , 727(1921-22).
T236	15¢	Loading tests of a hollow tile and reinforced concrete floor of Arlington Building, Washington, D.C. L.J. Larson and S.M. Petrenko. Tech. Pap. BS, T236, <u>17</u> , 405(1922-24).
T238	5¢	Some compressive tests of hollow tile walls. H.L. Whittemore and B.D. Hathcock. Tech. Pap. BS, T238, <u>17</u> , 513(1922-24).
T248	O.P.	Exposure tests on colorless waterproofing materials. D.W. Kessler. Tech. Pap. BS, T248, <u>18</u> , 1(1924-25).
T251	10¢	Equalizer apparatus for transverse tests of bricks. H.L. Whittemore. Tech. Pap. BS, <u>18</u> , 107(1924-25).

TECHNOLOGIC PAPERS (Cont'd.)

<u>Series</u>	<u>Price</u>	
T276	10¢	Compressive strength of sand-lime brick walls. H.L. Whittemore and A.F. Stang. Tech. Pap. BS, T276, <u>19</u> , 57(1924-25).
T291	25¢	Tests of hollow tile and concrete slabs reinforced in one direction. D.E. Parsons and A.H. Stang. Tech. Pap. BS, T291, <u>19</u> , 465 (1924-25).
T305	10¢	Permeability of stone. D.W. Kessler. Tech. Pap. BS, T305, <u>20</u> , 155(1925-26).
T307	O.P.	Durability of cement drain tile and concrete in alkali soils; fourth progress report (1923). G.M. Williams and I. Furlong. Tech. Pap. BS, T307, <u>20</u> , 191(1925-26).
T308	O.P.	Cement-lime mortars (with bibliography). H.V. Johnson. Tech. Pap. BS, T308, <u>20</u> , 241(1925-26).
T311	15¢	Compressive and transverse strength of hollow-tile walls. A.H. Stang, D.E. Parsons and H.D. Foster. Tech. Pap. BS, T311, <u>20</u> , 317(1925-26).
T341	5¢	A portable apparatus for transverse tests of brick. A.H. Stang. Tech. Pap. BS, T341, <u>21</u> , 347(1925-26).
T349	70¢	Physical properties of the principal commercial limestones used for building construction in the United States. D.W. Kessler and W.H. Sligh. Tech. Pap. BS, T349, <u>21</u> , 497(1926-27).
T350	O.P.	A study of problems relating to the maintenance of interior marble. D.W. Kessler. Tech. Pap. BS, T350, <u>21</u> , 591(1926-27).
T366	10¢	Strength of interlocking-rib tile walls. A.H. Stang, D.E. Parsons and A.B. McDaniel. Tech. Pap. BS, T366, <u>22</u> , 287(1927-28).
T370	20¢	Cause and prevention of kiln and dry-house scum and of efflorescence on face-brick walls. L.A. Palmer. Tech. Pap. BS, T370, <u>22</u> , 579 (1927-28).

RESEARCH PAPERS

<u>Series</u>	<u>Price</u>	
RP36	15¢	Studies of machines for extruding clay columns. Augers, spacers, and dies for brick machines. Paul C. Grunwell. BS J. Research <u>1</u> , 1023(1928).
RP37	75¢	Fire resistance of hollow load-bearing wall tile. S.H. Ingberg and H.D. Foster. BS J. Research <u>2</u> , 1(1929).
RP48	5¢	Transmission of sound through wall and floor structures. V.L. Chrisler and W.F. Snyder. BS J. Research <u>2</u> , 541(1929).
RP59	5¢	The compressive and transverse strength of brick. J.W. McBurney. BS J. Research <u>2</u> , 821(1929).
RP88	10¢	Some absorption properties of clay bricks. L.A. Palmer. BS J. Research <u>3</u> , 105(1929).
RP108	30¢	Compressive strength of clay brick walls. A.H. Stang, D.E. Parsons and J.W. McBurney. BS J. Research <u>3</u> , 507(1929).
RP181	15¢	Tests of composite beams and slabs of hollow tile and concrete. D.E. Parsons and A.H. Stang. BS J. Research <u>4</u> , 815(1930).
RP189	5¢	Methods of measuring strains between glazes and ceramic bodies. H.G. Schurecht and G.R. Pole. BS J. Research <u>5</u> , 97(1930).
RP290	10¢	Durability and strength of bond between mortar and brick. L.A. Palmer and J.V. Hall, jr. BS J. Research <u>6</u> , 473(1931).
RP291	O.P.	Heat transfer through building walls. M.S. Van Dusen and J.L. Finck. BS J. Research <u>6</u> , 493(1931).
RP310	5¢	Factors affecting the strength of masonry of hollow units. D.E. Parsons. BS J. Research <u>6</u> , 857(1931).
RP321	10¢	Volume changes in brick masonry materials. L.A. Palmer. BS J. Research <u>6</u> , 1003(1931).
RP389	5¢	The physical properties of cast stone. J. Tucker, jr., G.W. Walker and J.A. Swenson. BS J. Research <u>7</u> , 1067(1931).

RESEARCH PAPERS (Cont'd.)

<u>Series</u>	<u>Price</u>	
RP477	10¢	Physical properties and weathering characteristics of slate. D.W. Kessler and W.H. Sligh. BS J. Research <u>9</u> , 377(1932).
RP504	O.P.	Shear tests of reinforced brick masonry beams. D.E. Parsons, A.H. Stang and J.W. McBurney. BS J. Research <u>9</u> , 749(1932).
RP520	5¢	Compressive strength of steel columns incased in brick walls. A.L. Harris, A.H. Stang and J.W. McBurney. BS J. Research <u>10</u> , 123(1933).
RP563	5¢	Fire tests of columns protected with gypsum. N.D. Mitchell. BS J. Research <u>10</u> , 737(1933).
RP612	5¢	Wear resistance of natural stone floorings. D.W. Kessler. BS J. Research <u>11</u> , 635(1933).
RP675	5¢	Wear of dies for extruding plastic clay. R.T. Stull. BS J. Research <u>12</u> , 501(1934).
RP683	5¢	A study of the properties of mortars and bricks and their relation to bond. L.A. Palmer and D.A. Parsons. BS J. Research <u>12</u> , 609(1934).
RP771	5¢	Experiments on exterior waterproofing materials for masonry. Daniel W. Kessler. J. Research NBS <u>14</u> , 317(1935).
RP864	5¢	Action of "hypo" solution on stone tanks. Daniel W. Kessler. J. Research NBS <u>16</u> , 161 (1936).
RP952	5¢	Differences in limes as reflected in certain properties of masonry mortars. Lansing S. Wells, Dana L. Bishop and David Watstein. J. Research NBS <u>17</u> , 895(1936).
RP972	10¢	Compressive strength of structural tile masonry. Douglas E. Parsons and David Watstein. J. Research NBS <u>18</u> , 215(1937).

LETTER CIRCULARS

LC146	Free on application to Bureau	Publications by the National Bureau of Standards on sand-lime brick. Let. Cir. BS, LC146.
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LETTER CIRCULARS (Cont'd.)

<u>Series</u>	<u>Price</u>	
LC165	Free on appli- cation to Bureau	Publications relating to fire resistance and fire prevention. Let. Cir. BS, LC165.
LC228	"	The fire resistance of brick walls - brick made of clay or shale. Let. Cir. BS, LC228.
LC229	"	The fire resistance of brick walls - walls made of concrete or sand-lime brick. Let. Cir. BS, LC229.
LC266	"	Specifications for portable testing ma- chine for making transverse tests of building bricks. Let. Cir. BS, LC266.
LC287	"	List of published material relating to home building and maintenance. Let. Cir. BS, LC287.
LC391	"	Damp masonry walls above grade. Let. Cir. BS, LC391.
LC477	"	Sound absorption coefficients of the more common acoustic materials. Let. Cir. BS, LC477.

SIMPLIFIED PRACTICE RECOMMENDATIONS

R1-36	5¢	Vitrified paving brick. Simpl. Prac. NBS, R1-36 (1936).
R3-36	5¢	Metal lath. (Expanded and sheet). Simpl. Prac. NES, R3-36 (1936).
R7	5¢	Face brick and common brick. Simpl. Prac. BS, R7 (1923).
R12	5¢	Hollow building tile. Simpl. Prac. BS, R12 (1926).
R13-28	10¢	Structural slate (for plumbing and sanitary pur- poses). Simpl. Prac. BS, R13-28 (1928).
R14-28	5¢	Roofing slate. Simpl. Prac. BS, R14-28 (1928).
R15-35	5¢	Blackboard slate. Simpl. Prac. NES, R15 (1935).
R38-25*	5¢	Sand-lime brick. Simpl. Prac. BS, R38 (1925).

* Under review for revision.

SIMPLIFIED PRACTICE RECOMMENDATIONS (Cont'd.)

<u>Series</u>	<u>Price</u>	
R53-32	5¢	Steel reinforcing spirals. Simpl. Prac. BS, R53-32 (1932).
R61-30	10¢	Clay tiles for floors and walls. Simpl. Prac. BS, R61-30 (1930).

BUILDING AND HOUSING

BH6	O.P.	Recommended minimum requirements for masonry wall construction. BH6 (1925).
BH14	10¢	Recommended minimum requirements for fire resistance in buildings. BH14 (1931).
BH15	15¢	Care and repair of the home. BH15 (1931).
BH18	10¢	Recommended minimum requirements for small dwelling construction. BH18 (1932).

FEDERAL SPECIFICATIONS

The specifications listed below are issued by the Federal Specifications Executive Committee, Procurement Division, Federal Warehouse, Washington, D. C. Copies may be secured from the Superintendent of Documents, Government Printing Office, this city, at the prices indicated.

CC-B-101b	5¢	Bases, Metal; (For) Plaster and stucco construction.
SS-B-656	5¢	Brick; building, (common), clay.
SS-B-663	5¢	Brick; concrete.
SS-B-681	5¢	Brick; sand-lime.
SS-B-691	5¢	Brick; sewer, clay.
SS-C-621	5¢	Concrete-Units; masonry, hollow.
SS-P-361	5¢	Pipe; clay, sewer.
SS-P-686	5¢	Products; acoustic, cast.
SS-S-451	5¢	Slate; roofing.
SS-S-721	5¢	Stone, architectural, cast.
SS-T-321	5¢	Tile; structural, clay, floor.
SS-T-341	5¢	Tile; structural, load-bearing, wall.
SS-T-351	5¢	Tile; structural, clay, non-load-bearing.

ARTICLES PUBLISHED IN OUTSIDE JOURNALS

The articles indicated below are listed in chronological order. The name of the journal or of the organization publishing the article is given in abbreviated form, with address in parentheses, together with the volume number (underscored), page, and year of publication in the order named. These publications are not for distribution or sale by the Government, but may be consulted at most large libraries or in some cases may be purchased directly from the publishers.

The relation between the porosity and crushing strength of clay products. A.V. Bleininger. Trans. Am. Ceram. Soc. (American Ceramic Society, 2525 North High St., Columbus, Ohio), 12, 564(1910).

Tests for sewer pipe. R.J. Wis. Proc. Am. Soc. Testing Materials (American Society for Testing Materials, 260 South Broad St., Philadelphia, Pa.), 11, 854(1911).

The relation between the crushing strength and porosity of clay products. G.H. Brown. Trans. Am. Ceram. Soc., 14, 292(1912).

Use of the strain gage in the testing of materials. W.A. Slater and H.F. Moore. Proc. Am. Soc. Testing Materials, 13, 1019 (1913).

Some comparative corrosion tests of plastered metal lath. J.C. Pearson. Proc. Am. Concrete Inst. (American Concrete Institute, 7400 Second Blvd., Detroit, Mich.), 10, 445(1914).

Properties of cement-lime-sand mortars. W.L. Emley. Proc. Am. Soc. Testing Materials, 17, Part II, 261(1917).

Tests of stucco. J.C. Pearson. Proc. Am. Concrete Inst., 14, 109(1918).

Compressive strength of cement-lime mortars. F.A. Kirkpatrick and W.B. Orange. J. Am. Ceram. Soc., 2, 44(1919).

New developments in surface treated concrete and stucco. J.C. Pearson and J.J. Earley. Proc. Am. Concrete Inst., 16, 70 (1920).

Possibilities of terra cotta castings. R.F. Geller. J. Am. Ceram. Soc., 4, 883(1921).

Shrinkage of cement mortars and its importance in stucco construction. J.C. Pearson. Proc. Am. Concrete Inst., 17, 133(1921).

- Preliminary report of exposure tests on colorless waterproofing materials. D.W. Kessler. J. Am. Inst. Architects (American Institute of Architects, 1741 New York Ave., N.W., Washington, D.C.), Oct. 1921.
- Effectiveness of different methods of making absorption determinations as applied to hollow building tile. H.D. Foster. J. Am. Ceram. Soc. (American Ceramic Society, 2525 North High St., Columbus, Ohio), 5, 788(1922).
- Effect of grog additions on fire resistance of hollow tile. H.D. Foster. J. Am. Ceram. Soc., 6, 748(1923).
- Capping for compression specimens. H.D. Foster. J. Am. Ceram. Soc., 6, 623(1923).
- Sulphur impregnated sandstone. D.W. Kessler. Stone (1328 Broadway, New York, N.Y.), 44, June 1923.
- Factors affecting brick masonry strength. S.H. Ingberg. Proc. Am. Soc. Testing Materials (American Society for Testing Materials, 260 South Broad St., Philadelphia, Pa.), 24, Part II, 909(1924).
- Stucco investigations of the Bureau of Standards. J.C. Pearson. Proc. of Building Officials Conference, 10, 143(1924).
- Strength absorption and freezing resistance of hollow building tile. H.D. Foster. J. Am. Ceram. Soc., 7, 189(1924).
- Properties of gypsum tile. J.H. Porter. Proc. Am. Soc. Testing Materials, 24, Part II, 901(1924).
- The fire resistance of gypsum partitions. S.H. Ingberg. Proc. Am. Soc. Testing Materials, 25, Part II, 299(1925).
- Determining the weather resistance of stone. D.W. Kessler. Stone, 46, 351, June 1925.
- Comments on the permeability of stone. D.W. Kessler. Stone, 46, July 1925.
- A study of practical problems for the marble industry. D.W. Kessler. Stone, 46, August 1925.
- Resistance of marble to various salt solutions. D.W. Kessler. Through the Ages (Thomsen-Ellis Co., Water and Gay Sts., Baltimore, Md.), 3, February 1926.
- Cleaning materials for marble. D.W. Kessler. Through the Ages, 3, Part I, March 1926; Part II, April 1926; 4, Part III, June 1926; Part IV, August 1926.

Steam cleaning a stone building. H.H. Dutton. Am. Architect (Hearst Magazine, Inc., 572 Madison Ave., New York, N.Y.), June 20, 1926.

Discussion of specification requirements for common brick. C.O. Christiansen. Am. Architect, 130, 23, July 5, 1926.

Removal of stains from marble. D.W. Kessler. Through the Ages (Thomsen-Ellis Co., Water and Gay Sts., Baltimore, Md.), 4, September 1926; Arch. and Bldg. (Architecture and Building, Wm. T. Comstock Co., 23 Warren St., New York, N.Y., October 1926.

Comparative tests on brick masonry at the Bureau of Standards. J.W. McBurney. Bricklayer, Mason and Plasterer, 29, 225, October 1926.

Bases for specification and building code requirements for building bricks. S.H. Ingberg. Proc. 23d Annual Meeting of Sand-Lime Brick Assoc. (Saginaw, Mich.), 78(1927).

Removal of stains from marble. D.W. Kessler. Through the Ages, 4, January 1927.

Development of steam cleaning process. H.H. Dutton. Stone (1328 Broadway, New York, N.Y.), 48, 225, April 1927, and 238, May 1927.

Effect of workmanship on the strength of brick masonry. J.W. McBurney. Am. Architect, 132, 613, November 5, 1927.

The strength of solid and of hollow walls of brick. A.H. Stang. Ceram. Age (Ceramic Age, The Ceramic Publishing Co., E. Stroudsburg, Pa.), 198, December 1927.

Adhesion of plaster and stucco to hollow building tile. J.A. Murray and H.D. Foster. Am. Architect, 132, 839, December 20, 1927.

Effect of strength of brick on comparative strength of brick masonry. J.W. McBurney. Proc. Am. Soc. Testing Materials (American Society for Testing Materials, 260 South Broad St., Philadelphia, Pa.), 28, Part II, 605(1928).

The development of an apparatus for wear tests on flooring materials. D.W. Kessler. Proc. Am. Soc. Testing Materials, 28 Part II, 855(1928).

Wet walls and efflorescence. L.A. Palmer. Am. Face Brick Assn. (American Face Brick Association, 205 W. Wacker Drive, Chicago, Illinois), (1928).

Bond between concrete and hollow tile. J.C. Oleinik. Eng. and Contr. (Engineering and Contracting, Gillette Publishing Co., 401 W. Madison St., Chicago, Illinois), 67, 19, January 1928.

Strength of brick in tension. J.W. McBurney. J. Am. Ceram. Soc. (American Ceramic Society, 2525 North High St., Columbus, Ohio), 11, 114, February 1928.

New construction data on brick walls. A.F. Stang. Am. Contractor, July 30, 1928.

The water absorption and penetrability of brick. J.W. McBurney. Proc. Am. Soc. Testing Materials (American Society for Testing Materials, 260 South Broad St., Philadelphia, Pa.), 29, Part II, 711(1929).

Tests of elastic caulking compounds. H.E. Dutton. Proc. Am. Soc. Testing Materials, 29, Part II, 954(1929).

The physical properties of commercial cast stone. J. Tucker, jr. and G.W. Walker. Proc. Am. Concrete Inst. (American Concrete Institute, 7400 Second Blvd., Detroit, Mich.), 25, 501(1929).

The compressive and transverse strength of brick. J.W. McBurney. J. Am. Ceram. Soc., 12, 217, April 1929; also BS J. Research 2, 821(1929) RP59.

Some results of freezing and thawing tests made with clay brick. L.A. Palmer and J.V. Hall. Proc. Am. Soc. Testing Materials, 30, Part II, 767(1930).

The resistance of stone to frost action. D.W. Kessler. Proc. New Intern. Assn. Testing Materials (New International Association for Testing Materials, Leonhardstrasse 27, Zurich, Switzerland), Group B, 37(1930).

Tests for weathering characteristics. D.W. Kessler. Rock Products (Trade Press Publishing Corp., 205 W. Wacker Drive, Chicago, Illinois), 33, (1930).

The relation of Brinell hardness and transverse strength to the compressive strength of building brick. J.W. McBurney. J. Am. Ceram. Soc., 9, 823, November 1930.

Specifications for hollow masonry units. D.E. Parsons. Proc. Am. Soc. Testing Materials, 31, Part II, 595(1931).

The weathering of structural clay products: A review. J.W. McBurney. Proc. Am. Soc. Testing Materials, 31, Part II, 745(1931).

Weathering test procedures for stone. D.W. Kessler. Proc. Am. Soc. Testing Materials (American Society for Testing Materials, 260 South Broad St., Philadelphia, Pa.), 31, Part II, 799(1931).

Bibliography on weathering of natural stone. D.W. Kessler. Proc. Am. Soc. Testing Materials, 31, Part II, 804(1931).

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Water penetration through brick-mortar assemblages. L.A. Palmer. J. Clay Products Inst. (Clay Products Institute of America), 1, 19, September 1931.

The use of clay products in sound insulation. V.L. Chrisler. J. Clay Products Inst., 1, 31, September 1931.

Volume changes in brick masonry materials. L.A. Palmer. J. Am. Ceram. Soc. (American Ceramic Society, 2525 North High St., Columbus, Ohio), 14, 541, August 1931; also BS J. Research 6, 1003(1931) RP321.

The physical properties of cast stone. J. Tucker, jr., G.W. Walker and J. Arthur Swenson. Proc. Am. Concrete Inst. (American Concrete Institute, 7400 Second Blvd., Detroit, Mich.), 28, 243 (1931); also BS J. Research 7, 1067(1931) RP389.

The transmission of water through brick masonry. L.A. Palmer. Architectural Forum (521 Fifth Ave., New York, N.Y.), 56, 103, January 1932.

The color range of common brick. J.W. McBurney. J. Clay Products Inst., 1, 31, June 1932.

The rate of stiffening of mortars on a porous base. L.A. Palmer and D.A. Parsons. Rock Products (Trade Press Publishing Corp., 205 W. Wacker Drive, Chicago, Illinois), 35, 18, September 10, 1932.

Discussion of "Development in reinforced brick masonry." J.W. McBurney. Proc. Am. Soc. Civil Engr. (American Society of Civil Engineers, 33 W. 39th St., New York, N.Y.), 59, 1344, October 1933.

The strength, water absorption, and weather resistance of building bricks produced in the United States. J.W. McBurney and C.E. Lovewell. Proc. Am. Soc. Testing Materials, 33, Part II, 636 (1933).

Permeability tests of 8 inch WalleTTes. L.A. Palmer and D.A. Parsons. Proc. Am. Soc. Testing Materials (American Society for Testing Materials, 260 South Broad St., Philadelphia, Pa.), 34, Part II, 419(1934).

Comparison of natural weathering with laboratory tests of clay brick. D.E. Parsons. Proc. Am. Soc. Testing Materials, 35, Part I, Appendix II, 252(1935).

The relation of freezing and thawing resistance to physical properties of clay and shale building brick. J.W. McBurney. Proc. Am. Soc. Testing Materials, 35, Part I, Appendix I, 247(1935).

A test procedure for plastic caulking materials. D.W. Kessler. Proc. Am. Soc. Testing Materials, 35, Part II, 581(1935).

Water absorption of building brick. J.W. McBurney. Proc. Am. Soc. Testing Materials, 36, Part I, 260(1936).